WHAT IS CLAIMED IS:

1. A dielectric fluid comprising hydrocarbon liquid admixed with an ester-based compound, wherein the ester-based compound is present in an effective amount to impart breakdown inhibiting properties to a paper insulation material when the dielectric fluid is in contact with the paper material.

2. The fluid of claim 1 wherein the ester-based compound is present in the fluid at greater than about 5 wt% based on the total weight of the fluid.

3. The fluid of claim 1 wherein the ester-based compound is present in the fluid at less than about 50 wt%, based on the total weight of the fluid.

4. The fluid of claim 1 further comprising a material selected from a group consisting of a pour point depressant, an anti-oxidant, and an anti-microbial agent.

5. The fluid of claim 1 wherein the ester-based compound comprises at least one ester selected from the group consisting of natural esters, synthetic esters, and blends thereof.

6. The fluid of claim 1, wherein the ester-based compound is derived from a natural ester selected from the group consisting of soya, sunflower, canola, rapeseed, corn, peanut, cottonseed oils, crambe, meadowfoam, and the high oleic content versions thereof and blends thereof.

7. The fluid of claim 1, wherein the ester-based compound is a synthetic ester selected from the group consisting of diesters, polyol esters and blends thereof.

8. The fluid of claim 7, wherein the polyol esters are selected from the group consisting of neopentyl glycol, trimethylolpropane, pentaerythritol, dipentaerythritol and blends thereof.

9. The fluid of claim 7, wherein the diesters are selected from the group consisting of adipates, azelates, sebacates, dodecanedioates, phthalates, dimerates and blends thereof.

10. The fluid of claim 1, wherein the oil is an α-polyolefin.

11. An electrical device comprising

a substantially sealed container;

insulation paper inside said container; and

a dielectric fluid in contact with said paper, said fluid comprising hydrocarbon liquid admixed with an ester-based compound, wherein the ester-based compound is present in an effective amount to impart breakdown inhibiting properties.

12. The electrical device of claim 11 wherein the insulation paper maintains more than about 25% of its initial tensile strength after 1000 hours of operating time.

13. A transformer comprising:

(a) a tank housing a transformer core/coil assembly, wherein the core/coil assembly is insulated with paper insulating material; and

(b) a dielectric insulating fluid comprising hydrocarbon liquid admixed with an ester-based compound, wherein the ester-based compound is present in an effective amount to impart breakdown inhibiting properties to said paper insulating material.

14. The transformer of claim 13 wherein the paper insulating material degrades in said dielectric fluid at a rate slower than in a dielectric fluid without an ester-based compound.

15. The transformer of claim 13 wherein the ester-based compound imparts a breakdown inhibiting property selected from a group consisting of moisture retention, decreased gas evolution, increased degree of polymerization and combinations thereof.

16. A method of making an electrical device comprising:

providing an electrical device comprising paper insulating material inside said device; and filling said device with a dielectric fluid, said fluid comprising hydrocarbon liquid admixed with an ester-based compound, wherein the ester-based compound is present in an effective amount to impart breakdown inhibiting properties; and

substantially sealing said device with said fluid and paper therein.

17. A method of increasing the useful life of paper insulation immersed in a dielectric fluid comprising a step of adding an effective amount of an ester-based compound to the dielectric fluid, wherein the ester-based compound imparts breakdown inhibiting properties to said paper insulating material.

18. The method according to claim 17 wherein the ester-based compound is added in an amount equal to at least 5 wt%, based on the total weight of the dielectric fluid.

19. The method according to claim 17 wherein the dielectric oil is mineral oil.

20. A process for retrofilling an electrical device containing a non-ester based dielectric fluid comprising replacing the non-ester based dielectric fluid with a dielectric fluid composition comprising hydrocarbon liquid admixed with an ester-based compound, wherein the ester-based compound is present in an effective amount to impart breakdown inhibiting properties.